

the same paragraph, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

--RELATED APPLICATIONS

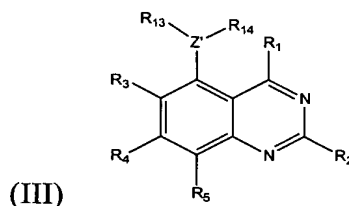
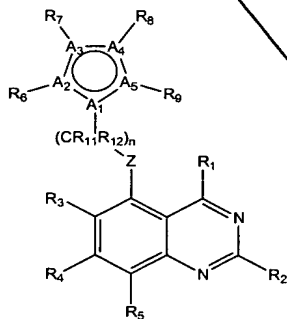
This application is a divisional of U.S. Serial No. 09/071,682, filed May 1, 1998, now U.S. Patent No. 6,204,267, which, in turn, claims priority to U.S. Serial Numbers 60/060,152, filed September 26, 1997 and 60/045,351, filed May 2, 1997, all of which are incorporated by reference herein in their entirety, including any drawings.--

In the Claims:

Please cancel claims 3 - 10, 13, 14 and 36 without prejudice or disclaimer.

Please amend the following claims:

1. (Amended) A method of modulating the function of a serine/threonine protein kinase with a quinazoline-based compound comprising the step of contacting cells expressing said serine/threonine kinase with said compound, or a pharmaceutically acceptable salt thereof, wherein said compound has the formula set forth in formula I or III:



wherein:

- (a) Z is oxygen, NX_1 , or sulfur, where X_1 is selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;
- (b) n is 0, 1, 2, 3, or 4;
- (c) A_1 , A_2 , A_3 , A_4 and A_5 are independently selected from the group consisting of carbon, nitrogen, oxygen, and sulfur,

provided that if any of A_1 , A_2 , A_3 , A_4 and A_5 is nitrogen, oxygen, or sulfur, said A_1 , A_2 , A_3 , A_4 and A_5 is not substituted with R_6 , R_7 , R_8 or R_9 ;

(d) R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_7 , R_8 and R_9 are independently selected from the group consisting of:

- (i) hydrogen;
- (ii) saturated or unsaturated alkyl;
- (iii) NX_2X_3 , where X_2 and X_3 are independently selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;
- (iv) halogen or trihalomethyl;
- (v) a ketone of formula $-CO-X_4$, where X_4 is selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;
- (vi) a carboxylic acid of formula $-(X_5)_{n5}-COOH$ or ester of formula $-(X_6)_{n6}-COOX_7$, where X_5 , X_6 , and X_7 are independently selected from the group consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where $n5$ and $n6$ are each independently 0 or 1;
- (vii) an alcohol of formula $-(X_8)_{n8}-OH$ or an alkoxy moiety of formula $-(X_8)_{n8}-OX_9$, where X_8 and X_9 are independently selected from the group consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where $n8$ is 0 or 1, and where said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;
- (viii) $-NHCOX_{10}$, where X_{10} is selected from the group consisting of alkyl, hydroxyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties, wherein said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;
- (ix) $-SO_2NX_{11}X_{12}$, where X_{11} and X_{12} are selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties; and
- (x) a five-membered or six-membered heteroaryl or six-membered aryl ring moiety optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester moieties;

(e) any adjacent R_3 , R_4 , and R_5 or any adjacent R_6 , R_7 , R_8 , and R_9 are fused together to

form a five-membered or six-membered heteroaryl or six-membered aryl ring moiety, wherein said five-membered or six-membered heteroaryl or six-membered aryl ring comprises two carbon atoms of quinoxaline ring to which R₃, R₄, and R₅ or R₆, R₇, R₈, and R₉ are attached; and

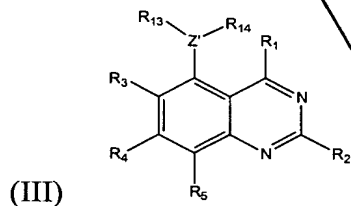
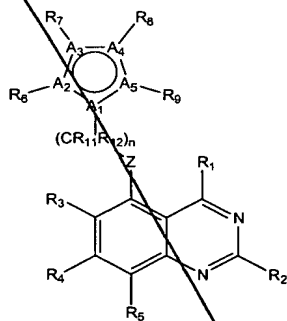
(f) R₁₁ and R₁₂ are independently selected from the group consisting of

(i) hydrogen;

(ii) saturated or unsaturated alkyl; and

(g) Z' is carbon, oxygen, sulfur, or nitrogen and R₁₃ and R₁₄ taken together form a five-membered or six-membered heteroaryl ring with Z' as a ring member.

11. (Amended) The method of claim 1, wherein said quinoxaline-based compound has the formula set forth in structure I or III:



wherein:

(a) Z is oxygen, NX₁, or sulfur, where X₁ is selected from the group consisting of hydrogen, saturated or unsaturated alkyl;

(b) n is 0, 1, 2;

(c) A₁, A₂, A₃, A₄ and A₅ are independently selected from the group consisting of carbon, nitrogen, oxygen, and sulfur,

provided that if any of A₁, A₂, A₃, A₄ and A₅ is nitrogen, oxygen, or sulfur, said A₁, A₂, A₃, A₄ and A₅ is not substituted with R₆, R₇, R₈ or R₉;

(d) R₁ and R₂ are independently selected from the group consisting of:

(i) hydrogen;
 (ii) saturated or unsaturated alkyl;
 (iii) NX_2X_3 , where X_2 and X_3 are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 (iv) halogen or trihalomethyl; and
 (v) five-membered or six-membered heteroaryl ring moiety;
 (e) $R_3, R_4, R_5, R_6, R_7, R_8$ and R_9 are independently selected from the group consisting of:

(i) hydrogen;
 (ii) saturated or unsaturated alkyl;
 (iii) NX_4X_5 , where X_4 and X_5 are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 (iv) halogen or trihalomethyl; and
 (v) $-OX_7$, where X_7 is selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and a five-membered or six-membered aryl or heteroaryl ring moiety;

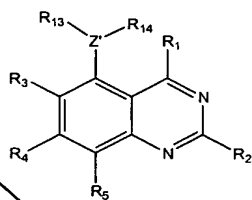
(f) any adjacent R_3, R_4 , and R_5 or any adjacent R_6, R_7, R_8 and R_9 are fused together to form a five-membered or six-membered aryl or heteroaryl ring moiety, wherein said five-membered or six-membered aryl or six-membered heteroaryl ring comprises two carbon atoms of the quinazoline ring to which R_3, R_4 , and R_5 or R_6, R_7, R_8 , and R_9 are attached;

(g) R_{11} and R_{12} are independently selected from the group consisting of

(i) hydrogen;
 (ii) saturated or unsaturated alkyl; and

(h) Z' is carbon, oxygen, sulfur, or nitrogen and R_{13} and R_{14} taken together form a five-membered or six-membered heteroaryl ring with Z' as a ring member, wherein said ring is optionally substituted with one, two, or three alkyl, halogen, trihalomethyl, carboxylate, and ester moieties.

12. (Amended) The method of claim 1, wherein said quinazoline-based compound has the formula set forth in formula V:



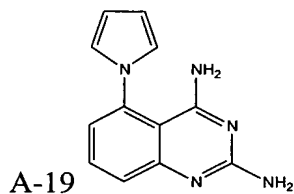
(V)

wherein:

- (a) Z is oxygen or sulfur;
- (b) n is 0 or 1;
- (c) R₁ and R₂ are independently selected from the group consisting of:
- (i) hydrogen;
 - (ii) NX₁X₂, where X₁ and X₂ are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 - (iii) benzyl;
- (d) R₃, R₄, and R₅ are independently selected from the group consisting of:
- (i) hydrogen; and
 - (ii) saturated or unsaturated alkyl;
 - (iii) NX₃X₄, where X₃ and X₄ are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl; and
- (e) R₁₁ and R₁₂ hydrogen; and
- (f) Z' is nitrogen and R₁₃ and R₁₄ taken together form a five-membered heteroaryl

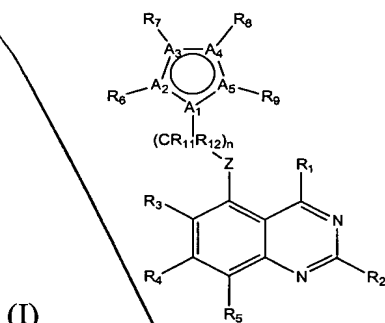
ring.

16. (Amended) The method of claim 1, wherein said quinazoline-based compound is:

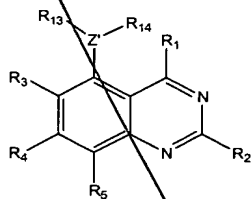


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17. (Amended) A method of preventing or treating an abnormal condition in an organism, comprising the step of administering a quinazoline-based compound of formula I or III to said organism:



(I)



(III)

wherein:

(a) Z is oxygen, NX_1 , or sulfur, where X_1 is selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;

(b) n is 0, 1, 2, 3, or 4;

(c) A_1 , A_2 , A_3 , A_4 and A_5 are independently selected from the group consisting of carbon, nitrogen, oxygen, and sulfur,

provided that if any of A_1 , A_2 , A_3 , A_4 and A_5 is nitrogen, oxygen, or sulfur, said A_1 , A_2 , A_3 , A_4 and A_5 is not substituted with R_6 , R_7 , R_8 or R_9 ;

(d) R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_7 , R_8 and R_9 are independently selected from the group consisting of:

(i) hydrogen;

(ii) saturated or unsaturated alkyl;

(iii) NX_2X_3 , where X_2 and X_3 are independently selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;

(iv) halogen or trihalomethyl;

(v) a ketone of formula $-CO-X_4$, where X_4 is selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;

(vi) a carboxylic acid of formula $-(X_5)_{n5}-COOH$ or ester of formula $-(X_6)_{n6}-COOX_7$, where X_5 , X_6 , and X_7 and are independently selected from the group

consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where n_5 and n_6 are each independently 0 or 1;

(vii) an alcohol of formula $-(X_8)_{n_8}-OH$ or an alkoxy moiety of formula $-(X_8)_{n_8}-OX_9$, where X_8 and X_9 are independently selected from the group consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where n_8 is 0 or 1, and where said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;

(viii) $-NHC(=O)X_{10}$, where X_{10} is selected from the group consisting of alkyl, hydroxyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties, wherein said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;

(ix) $-SO_2NX_{11}X_{12}$, where X_{11} and X_{12} are selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties; and

(x) a five-membered or six-membered heteroaryl or six-membered aryl ring moiety optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester moieties;

(e) any adjacent R_3 , R_4 , and R_5 or any adjacent R_6 , R_7 , R_8 , and R_9 are fused together to form a five-membered or six-membered heteroaryl or six-membered aryl ring moiety, wherein said five-membered or six-membered heteroaryl or six-membered aryl ring comprises two carbon atoms of the quinoxaline ring to which R_3 , R_4 , and R_5 or R_6 , R_7 , R_8 , and R_9 are attached; and

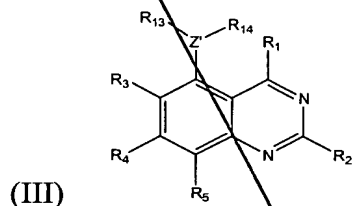
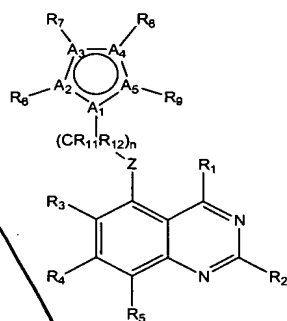
(f) R_{11} and R_{12} are independently selected from the group consisting of

(i) hydrogen;

(ii) saturated or unsaturated alkyl; and

(g) Z' is carbon, oxygen, sulfur, or nitrogen and R_{13} and R_{14} taken together form a five-membered or six-membered heteroaryl ring with Z' as a ring member.

26. (Amended) A quinoxaline compound having the formula I or III:



wherein:

- (i) Z is oxygen, NX_1 , or sulfur, where X_1 is selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;
- (ii) n is 0, 1, 2, 3, or 4;
- (iii) A_1 , A_2 , A_3 , A_4 and A_5 are independently selected from the group consisting of carbon, nitrogen, oxygen, and sulfur, provided that if any of A_1 , A_2 , A_3 , A_4 and A_5 is nitrogen, oxygen, or sulfur, said A_1 , A_2 , A_3 , A_4 and A_5 is not substituted with R_6 , R_7 , R_8 or R_9 ;
- (iv) R_1 and R_2 are independently selected from the group consisting of:
 - (a) hydrogen;
 - (b) saturated or unsaturated alkyl;
 - (c) NX_2X_3 , where X_2 and X_3 are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 - (d) halogen or trihalomethyl; and
 - (e) five-membered or six-membered heteroaryl ring moiety;
- (v) R_3 , R_4 , R_5 , R_6 , R_7 , R_8 and R_9 are independently selected from the group consisting of:
 - (a) hydrogen;
 - (b) saturated or unsaturated alkyl;

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(c) $\text{NX}_{13}\text{X}_{14}$, where X_{13} and X_{14} are independently selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered aryl or heteroaryl ring moieties;

(d) halogen or trihalomethyl;

(e) a ketone of formula $-\text{CO}-\text{X}_4$, where X_4 is selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;

(f) a carboxylic acid of formula $-(\text{X}_5)_{n5}-\text{COOH}$ or ester of formula $-(\text{X}_6)_{n6}-\text{COOX}_7$, where X_5 , X_6 , and X_7 are independently selected from the group consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where $n5$ and $n6$ are each independently 0 or 1;

(g) an alcohol of formula $-(\text{X}_8)_{n8}-\text{OH}$ or an alkoxy moiety of formula $-(\text{X}_8)_{n8}-\text{OX}_9$, where X_8 and X_9 are independently selected from the group consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where $n8$ is 0 or 1, and where said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;

(h) $-\text{NHCOX}_{10}$, where X_{10} is selected from the group consisting of alkyl, hydroxyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties, wherein said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;

(i) $-\text{SO}_2\text{NX}_{11}\text{X}_{12}$, where X_{11} and X_{12} are selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties; and

(j) a five-membered or six-membered heteroaryl or six-membered aryl ring moiety optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester moieties;

(vi) any adjacent R_3 , R_4 , and R_5 or any adjacent R_6 , R_7 , R_8 , and R_9 are fused together to form a five-membered or six-membered heteroaryl or six-membered aryl ring moiety, wherein said five-membered or six-membered heteroaryl or six-membered aryl ring comprises two carbon atoms of the quinoxaline ring to which R_3 , R_4 , and R_5 or R_6 , R_7 , R_8 , and R_9 are attached;

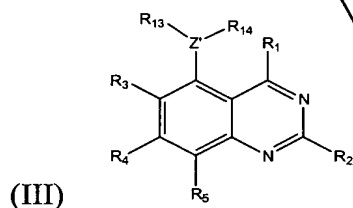
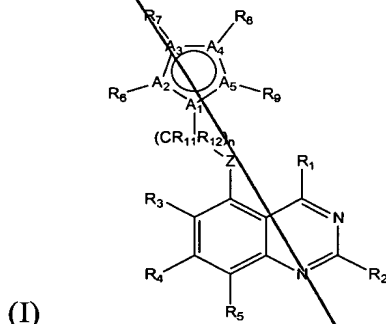
(vii) R_{11} and R_{12} are independently selected from the group consisting of

(i) hydrogen;

(ii) saturated or unsaturated alkyl; and

(viii) Z' is carbon, oxygen, sulfur, or nitrogen and R₁₃ and R₁₄ taken together form a five-membered or six-membered heteroaryl ring with Z' as a ring member.

27. (Amended) A quinazoline compound having the formula I or III:

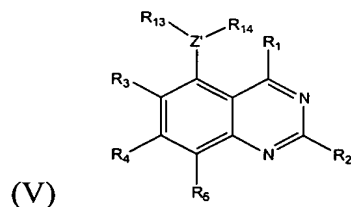


wherein:

- (a) Z is oxygen, NX₁, or sulfur, where X₁ is selected from the group consisting of hydrogen, saturated or unsaturated alkyl;
- (b) n is 0, 1, 2;
- (c) A₁, A₂, A₃, A₄ and A₅ are independently selected from the group consisting of carbon, nitrogen, oxygen, and sulfur, provided that if any of A₁, A₂, A₃, A₄ and A₅ is nitrogen, oxygen, or sulfur, said A₁, A₂, A₃, A₄ and A₅ is not substituted with R₆, R₇, R₈ or R₉;
- (d) R₁ and R₂ are independently selected from the group consisting of:
 - (i) hydrogen;
 - (ii) saturated or unsaturated alkyl;
 - (iii) NX₂X₃, where X₂ and X₃ are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 - (iv) halogen or trihalomethyl; and
 - (v) five-membered or six-membered heteroaryl ring moiety;
- (e) R₃, R₄, R₅, R₆, R₇, R₈ and R₉ are independently selected from the group consisting of:

- (i) hydrogen;
 (ii) saturated or unsaturated alkyl;
 (iii) NX_4X_5 , where X_4 and X_5 are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 (iv) halogen or trihalomethyl;
 (v) $C(X_6)_3$, where X_6 is selected from the group consisting of fluorine, chlorine, bromine and iodine;
 (vi) $-OX_7$, where X_7 is selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and a five-membered or six-membered aryl or heteroaryl ring moiety;
 (f) any adjacent R_3 , R_4 , and R_5 or any adjacent R_6 , R_7 , R_8 and R_9 are fused together to form a five-membered or six-membered aryl or heteroaryl ring moiety, wherein said five-membered or six-membered aryl or six-membered heteroaryl ring comprises two carbon atoms of the quinazoline ring to which R_3 , R_4 , and R_5 or R_6 , R_7 , R_8 , and R_9 are attached;
 (g) R_{11} and R_{12} are independently selected from the group consisting of
 (i) hydrogen;
 (ii) saturated or unsaturated alkyl; and
 (h) Z' is carbon, oxygen, sulfur, or nitrogen and R_{13} and R_{14} taken together form a five-membered or six-membered heteroaryl ring with Z' as a ring member, wherein said ring is optionally substituted with one, two, or three alkyl, halogen, trihalomethyl, carboxylate, and ester moieties.

28. (Amended) A quinazoline compound having the structure set forth in formula V:

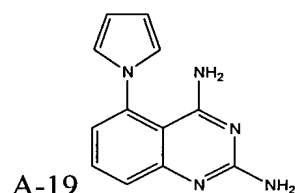


wherein:

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- (a) Z is oxygen or sulfur;
- (b) n is 0 or 1;
- (c) R₁ and R₂ are independently selected from the group consisting of:
- (i) hydrogen;
 - (ii) NX₁X₂, where X₁ and X₂ are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
 - (iii) benzyl;
- (d) R₃, R₄, and R₅ are independently selected from the group consisting of:
- (i) hydrogen;
 - (ii) saturated or unsaturated alkyl; and
 - (iii) NX₃X₄, where X₃ and X₄ are independently selected from the group consisting of hydrogen and saturated or unsaturated alkyl;
- (e) R₁₁ and R₁₂ hydrogen; and
- (f) Z' is nitrogen and R₁₃ and R₁₄ taken together form a five-membered heteroaryl ring.

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32. (Amended) A quinazoline compound which is:

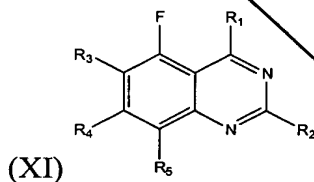


33. (Amended) A pharmaceutical composition comprising a quinazoline compound of any one of claims 26, 27, 31 or 32 or salt thereof, and a physiologically acceptable carrier or diluent.

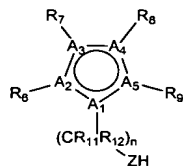
34. (Amended) A method for synthesizing a compound of claim 26, comprising the steps of:

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(a) reacting a first reactant with a second reactant to yield said compound, wherein said first reactant has a structure of formula XI:



and wherein said second structure has a structure of formula (XII):



wherein,

- (a) Z is oxygen or sulfur;
- (b) n is 0, 1, 2, 3, or 4;
- (c) A₁, A₂, A₃, A₄, and A₅ are independently selected from the group consisting of carbon, nitrogen, oxygen, and sulfur, provided that if any of A₁, A₂, A₃, A₄ and A₅ is nitrogen, oxygen, or sulfur, said A₁, A₂, A₃, A₄ and A₅ is not substituted with R₆, R₇, R₈ or R₉;
- (d) R₁ and R₂ are independently selected from the group consisting of:
 - (i) hydrogen;
 - (ii) saturated or unsaturated alkyl;
 - (iii) NX₂X₃, where X₂ and X₃ are independently selected from the group consisting of hydrogen, saturated or unsaturated alkyl,
 - (iv) halogen or trihalomethyl; and
 - (v) five-membered or six-membered heteroaryl ring moiety;
- (e) R₃, R₄, R₅, R₆, R₇, R₈, and R₉ are independently selected from the group consisting of:
 - (i) hydrogen;
 - (ii) saturated or unsaturated alkyl;
 - (iii) NX₁₃X₁₄, where X₁₃ and X₁₄ are independently selected from the group consisting of hydrogen, saturated or unsaturated alkyl, and five-membered or six-membered aryl or heteroaryl ring moieties;
 - (iv) halogen or trihalomethyl;
 - (v) a ketone of formula -CO-X₄, where X₄ is selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties;
 - (vi) a carboxylic acid of formula -(X₅)_{n5}-COOH or ester of formula -(X₆)_{n6}-COOX₇, where X₅, X₆, and X₇ and are independently selected from the group

consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where n_5 and n_6 are 0 or 1;

(vii) an alcohol of formula $-(X_8)_{n_8}-OH$ or an alkoxy moiety of formula $-(X_8)_{n_8}-OX_9$, where X_8 and X_9 are independently selected from the group consisting of alkyl and five-membered or six-membered heteroaryl or six-membered aryl ring moieties and where n_8 is 0 or 1, and where said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;

(viii) $-NHCOX_{10}$, where X_{10} is selected from the group consisting of alkyl, hydroxyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties, wherein said ring moieties are optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester;

(ix) $-SO_2NX_{11}X_{12}$, where X_{11} and X_{12} are selected from the group consisting of hydrogen, alkyl, and five-membered or six-membered heteroaryl or six-membered aryl ring moieties; and

(x) a five-membered or six-membered heteroaryl or six-membered aryl ring moiety optionally substituted with one or more substituents selected from the group consisting of alkyl, halogen, trihalomethyl, carboxylate, and ester moieties;

(f) any adjacent R_3 , R_4 , and R_5 or any adjacent R_6 , R_7 , R_8 , and R_9 are fused together for form a five-membered or six-membered aryl or heteroaryl ring wherein said five-membered or six-membered aryl or heteroaryl ring comprises two carbon atoms of the quinazoline ring to which R_3 , R_4 , and R_5 or R_6 , R_7 , R_8 , and R_9 are attached;

(g) R_{11} and R_{12} are independently selected from the group consisting of

(i) hydrogen; and

(ii) saturated or unsaturated alkyl; and

(b) collecting a precipitate comprising said compound.

37. (Amended) The method of claim 34, wherein said first reactant and said second reactant are mixed in one or more solvents selected from the group consisting of dimethyl sulfoxide, potassium tert-butoxide, and sodium hydride.

REMARKS

Claims 1 - 17, 20 - 28, 31 - 34 and 36 - 39 are pending. Claims 3 - 10, 13, 14 and 36 have been canceled, claims 2, 15, 20 - 25, 31, 38 and 39 have been retained and claims 1, 11, 12, 16, 17, 26 - 28, 32 - 34 and 37 have been amended.

I. Election/Restriction

In item 3, on page 2 of the Office Action, the Examiner alleges that claims 1, 2, 10 - 12, 16, 26 - 28, 32 - 34 and 37 - 39 are drawn to an improper Markush group. Applicants assert that this rejection has been rendered moot in light of the amendments to claims 1, 16, 26, 27, 32 - 34 and 37, where structure II was removed from all pertinent claims. Reconsideration and withdrawal of the rejection is earnestly sought.

II. Priority

On page 3 of the Office Action, the Examiner has apparently objected to the absence in the application of a paragraph which delineates the priority claim of the present application. Applicants assert that this apparent objection has been rendered moot in light of the amendments to the specification. Withdrawal of the objection is respectfully requested.

III. Rejection of claims 1 and 2 under 35 U.S.C. § 112, first paragraph

In light of the foregoing amendments to claim 1, Applicants assert that this rejection has been rendered moot. Reconsideration and withdrawal of the rejection is respectfully requested.

IV. Rejections of Claims 1, 2, 10 - 12, 26, 28, 33, 34 and 37 - 39 under 35 U.S.C. § 112, Second Paragraph

On page 4, of the Office Action the Examiner has rejected claims 1, 2, 10 - 12, 26, 28, 33, 34 and 37 - 39 under 35 U.S.C. § 112, second paragraph. Applicants address the Examiner's rejections in the order a) through r), as they appear on pages 4 - 6 of the Office Action.

- a) Claims 1 and 2 as allegedly being vague and indefinite.

In light of the amendments to claim 1, Applicants assert that this rejection is moot.

- b) Claims 10 and 11 lacking antecedent basis for "structure (I)"

In light of the amendments to claim 1 and the cancellation of claim 10, Applicants assert that this rejection is moot.

- c) Claim 10 is allegedly vague since it is allegedly not known what is meant by the variable R in structure (I).

In light of the cancellation of claim 10, Applicants assert that this rejection is moot.

d) Claim 10 is allegedly vague and indefinite because of the use of different definitions for the variable “n.”

In light of the cancellation of claim 10, Applicants assert that this rejection is moot.

e) Claim 10 is allegedly vague and indefinite because of the use of different definitions for the variable “n.”

In light of the cancellation of claim 10, Applicants assert that this rejection is moot.

f) Claim 11 is allegedly vague since it is allegedly not known what is meant by the variable R in structures (I) and (III).

In light of the amendment to claim 11, Applicants assert that this rejection is moot. Specifically, Applicants have amended structures (I) and (III) to correct what is ostensibly a clerical error where R_2 was meant instead of R, in structures (I) and (III).

g) Claim 11 is allegedly vague since it is allegedly not known what is meant by the variable R_2 since there is not an R_2 variable in structures (I) and (III).

In light of the amendment to claim 11, Applicants assert that this rejection is moot. Specifically, Applicants have amended structures (I) and (III) to correct what is ostensibly a clerical error where R_2 was meant instead of R, in structures (I) and (III).

h) Claim 12 is allegedly vague since it is allegedly not known what is meant by the variable R in structure (V).

In light of the amendment to claim 12, Applicants assert that this rejection is moot. Specifically, Applicants have amended structure (V) to correct what is ostensibly a clerical error where R_2 was meant instead of R, in structure (V).

(i) Claim 12 is allegedly vague since it is allegedly not known what is meant by the variable R_2 since there is not an R_2 variable in structure (V).

In light of the amendment to claim 12, Applicants assert that this rejection is moot. Specifically, Applicants have amended structure (V) to correct what is ostensibly a clerical error where R_2 was meant instead of R, in structure (V).

(j) Claim 26 is allegedly vague and indefinite because the variable “n” in structure (I) is not defined in the claim.

In light of the amendments to claim 26, Applicants assert that this rejection is moot. Specifically, Applicants have introduced a definition of the variable “n.”

(k) Claim 26 is allegedly vague and indefinite because there is no “paragraph” (ii).

In light of the amendments to claim 26, Applicants assert that this rejection is moot. Specifically, paragraph (ii) was inserted.

(l) Claim 26 is allegedly vague and indefinite because it is not known what is meant by the two paragraphs (v).

In light of the amendments to claim 26, Applicants assert that this rejection is moot. Specifically, Applicants have corrected the paragraph numbering in claim 26 such that there is only one paragraph (v).

(m) Claim 26 is allegedly vague and indefinite because of the two different definitions of X_2 and X_3 within the claim.

In light of the amendments to claim 26, Applicants assert that this rejection is moot. Specifically, Applicants have amended the definitions of the X-variables in section (v)(c) of claim 26 to recite X_{13} and X_{14} .

(n) Claim 28 is allegedly vague and indefinite since there are two different definitions of R_3 , R_4 and R_5 .

In light of the amendments to claim 28, Applicants assert that this rejection is moot. Specifically, Applicants have amended the claim such that there is only one definition of R_3 , R_4 and R_5 .

(o) Claim 33 is dependent upon two cancelled claims.

In light of the amendment to claim 33, Applicants assert that this rejection is moot. Specifically, Applicants have amended the claim such that it depends upon claims 26, 27, 31 or 32 and no longer depends upon cancelled claims 28 and 29.

(p) Claim 34 and 37 - 39 is allegedly vague and indefinite because there are multiple different definitions of the variable "n."

In light of the amendments to claim 34, Applicants assert that this rejection is moot. Specifically, Applicants have amended the claim such that there is only one definition of the variable "n."

(q) and (r) Claim 37 is dependent upon cancelled claims 35 and 36.

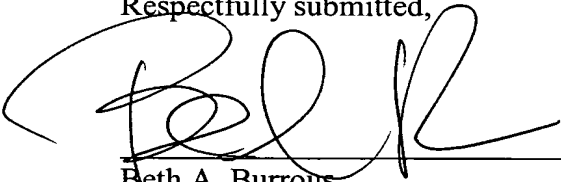
In light of the amendment to claim 37, Applicants assert that this rejection is moot. Specifically, Applicants have amended the claim such that it no longer depends upon cancelled claims 35 and 36. As amended, claim 37 depends on claim 34.

V. Conclusion

In view of the above remarks and amendments, it is respectfully submitted that this application is in condition for allowance. Early notice to that effect is earnestly solicited. Examiner Coleman is invited to telephone the undersigned at the number listed below if she believes such would be helpful in advancing the application to issue.

11/19/02

Date

Respectfully submitted,


Beth A. Burrous
Reg. No. 35,087

Foley & Lardner
3000 K Street, NW
Washington, DC 20007
Tel:(202) 672-5300
Fax:(202) 672-5399